

Expatriates and Community: Identifying the Association Between  
Sense of Community and Depression Among Expatriates Living in  
South Korea

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Expatriates and Community: Identifying the Association Between  
Sense of Community and Depression Among Expatriates Living in  
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*This paper, and Master's degree, is dedicated to my "Big Five."  
Thank you for always being my cheerleaders.*

## TABLE OF CONTENTS

LIST OF FIGURES.....	viii
LIST OF TABLES.....	ix
ABSTRACT.....	x
CHAPTER I: INTRODUCTION.....	1
Problem and Significance.....	1
Purpose of the Study.....	3
CHAPTER II: LITERATURE REVIEW.....	4
Defining the Expatriate.....	4
Sense of Community.....	5
Mental Health and Depression.....	10
Sense of Community and Depression.....	13
Mental Health and Positive Adaptation.....	15
CHAPTER III: METHODOLOGY.....	16
Pilot Study.....	16
Focus Group.....	17
Research Design.....	20
Instruments.....	28
Data Analysis.....	29
CHAPTER IV: RESULTS.....	30
CHAPTER V: DISCUSSION.....	44
Discussion of Findings.....	44
Recommendations for Future Research.....	45

Limitations.....	46
CHAPTER V1: CONCLUSION.....	47
REFERENCES.....	48
APPENDICES.....	54

## LIST OF FIGURES

Figure 1. Flow Chart of the Study Design.....	20
Figure 2. Flow Chart of the Study Sample.....	21



## LIST OF TABLES

Table 1. Focus Group Responses About the Korean Community.....	19
Table 2. General Characteristics of Study Participants.....	30
Table 3. Sense of Community Index-2 and Symptom Checklist-90-Revised (Depression) Total Scores.....	33
Table 4. Factors Associated with Depression Among Expatriates in South Korea.....	35
Table 5. Unadjusted Association of Depression Among Expatriates in South Korea Using Logistic Regression Analysis.....	37
Table 6. Adjusted Association of Depression Among Expatriates in South Korea Using Logistic Regression Analysis.....	39
Table 7. Factors Associated with Nationality Among Expatriates in South Korea.....	41
Table 8. Final Adjusted Association of Depression Among Expatriates in South Korea Using Logistic Regression Analysis.....	43

## ABSTRACT

The number of expatriates living in South Korea is steadily increasing. As expatriates, they are at greater risk of mental health disorders such as depression. Research has shown that depression may be mediated by sense of community. This research study sought to explore the relationship between Sense of Community and depression among expatriates in the Republic of Korea. The Sense of Community Index-2 (SCI-2) and Symptom Checklist-90-Revised (SCL-90-R) were used to measure sense of community and depression. Two hundred expatriates in South Korea were recruited to participate in the study using social media. No association was found between sense of community and depression among expatriates living in South Korea. However, an association was found between depression among expatriates in South Korea and nationality. Non-Americans were found to be 3.3 times more likely to have high levels of depression when compared with Americans.

*Keywords:* expatriates, South Korea, depression, sense of community

## CHAPTER I: INTRODUCTION

### **Problem and Significance**

In recent decades, the number of expatriates relocating to South Korea continues to increase. The Korean Statistical Information Service (KOSIS) indicates that about 1.3 million (military affiliation not specified) expatriates as of March 2014 have moved to South Korea (KOSIS, 2014). With more than one million expatriates living in South Korea, representing 2% of the country's total population (51,202,130 as of April 2014), the foreign community is becoming a valid topic of discussion (Ministry of Security and Public Administration, 2014).

Though foreign communities participate in new and stimulating experiences, they also face a number of challenges and concerns (Collings, Doherty, Luethy, & Osborn, 2011). One of the major concerns for travelers relocating to a new land can be their health and the health status in that particular country. About five to seven percent of expatriates do not complete their assignment due to medical and psychological reasons (Bunn, 2001 as cited by Dijkstra, Chappui, & Loutan, 2005). As mentioned in a comprehensive report conducted at the beginning of the millennium, some of the major health threats and concerns among travelers are often related to, but are not limited to, water quality, food hygiene, climatic factors, sexual health, security, accidents, occupational hazards, and behavioral and psychosocial factors (Jones, 2000).

Among those psychosocial factors are mental health disorders, such as depression. Research studies conducted in countries all over the world have shown that depression heavily exists within migrant populations (Fenta et al., 2004; Bhugra et al., 2004; Levecque et al., 2007; Park et al., 2008; Haasen et al., 2008). More specifically, studies

have indicated that expatriates, in particular, have an increased risk of depression compared with host-country nationals or residents of their native countries (Cardozo et al, 2005; Oei et al., 2007; Al-Abdulla, 2011; Truman et al., 2011).

A study of expatriates in Turkey revealed that depression had a significant relationship with contemplation of repatriation, self-efficacy, proactive attitudes, host culture acculturation, neighbors, and socialization (Hünler, 2012). Other studies have indicated that community or social support may be an effective indicator for depression among expatriate groups (Ayers et al., 2009). In a study of Asian international students, interaction with hosts served as a partial-mediator for sociocultural adjustment (Li, 2005), a by-product of positive mental health (Berry, 1997, as cited by Rostamzadeh, Anantharaman, & Tong, 2012). This study suggests that community interaction among expatriates may serve as a mediator for mental health disorders, such as depression.

In this author's literature review, only a few references to expatriates and depression were found. In particular, this author found few studies on the topic as it relates to expatriates residing in South Korea. Therefore, this study will focus on this research gap in the fields of mental health, community, expatriation, and Eastern Asian studies by researching the following question: Is there a correlation between a sense of community and depression among expatriates living in South Korea? By doing so, this project may assist both South Korean governmental organizations and non-governmental organizations better understand how to effectively cater to the needs of expatriates living in their country. Additionally, this study may provide expatriates with meaningful information about how they can better adapt to the unique country that is South Korea.

### **Purpose of the Study**

The literature review revealed that expatriates, individuals living and working in a foreign country, need a good sense of community in order to mediate depression. When a strong sense of community is present, expatriates tend to have higher retention rates, be less depressed, and feel more confident about their assignments. As a result, the aim of this study is to explore the relationship between Sense of Community and depression among expatriates in the Republic of Korea.

## CHAPTER II: LITERATURE REVIEW

This section will provide the theoretical framework for the present research study. It will outline the relevance of the study and illustrate the motivations behind the study's approach.

### **Defining the Expatriate**

In order to understand expatriation, it is necessary to understand the definition of expatriates. This author's literature review revealed a common theme included in the definition of expatriates. Research studies reviewed have commonly defined expatriates as individuals, and family members, who reside in a country not of their own for an extended period of time (Jones, 2000; Dijkstra, Chappuis, &Loutan, 2005). Dijkstra, Chappuis, &Loutan (2005) further explain that expatriates' occupations may include "diplomats, businessmen, technical experts, military personnel, missionaries, field researchers, humanitarian workers, and relief personnel."

Noe et al. (2006) defined an expatriate as "an employee sent by his or her company in one country to manage operations in a different country." This definition implicitly argues that an expatriate possesses higher-level skills and proficiencies. An individual who is able to "manage operations" is typically not inclusive of those who perform more physically laborious tasks. Additionally, the definition implies that the expatriates already have a secured and stable job in their home nation and are not driven to relocate due to difficult living conditions in their native land, like a migrant would typically be. Thus, migrants will not be included in this research study.

Other definitions, however, have indicated that not all expatriates are *sent* to live in another country. Some expatriates are "self-initiated," seeking a varied experience

abroad (Tharenou & Caulfield, 2010). Though their “motivation to go” may differ, many expatriates make a personal decision to leave their home country and live and work in a host country, as explored by academic researchers Richardson and McKenna (2002). Therefore, for this particular research study, the definition of an expatriate will include any skilled persons that have relocated to South Korea for the purpose of employment.

### **Sense of Community**

Despite the abundant opportunities for financial and academic profit, expatriates still face a number of difficulties when living abroad. Community can often be a safeguard against challenges that people experience (Riger and Lavrakas, 1981). Riger and Lavrakas cited in the same 1981 article that the 1978 President’s Commission on Mental Health’s Task Panel on Community Support Systems “emphasized that social and community support not only can reduce the consequences of emotional stress, but also can help prevent stress from developing.” In addition to psychology, the fields of social work, sociology, community development, and public health also recognize community as such a buffer. More important than community existing is the need for individuals in the community to actually feel that it exists. To date, there have been a number of different tools to identify this feeling and define one’s sense of community:

Hillery (1955) documented 94 different descriptions of community. The term community was used to describe varying organizations and assemblies that exist due to geographical location, political interest, or social hobbies (Hillery, 1955). In 2002, Sense of Community was defined by Community Psychologists. Bess et al. (2002) and Fisher et al. (2002) indicated that Sense of Community involves “emotional connectedness” experienced by individuals collectively (as cited by Cicognani, Pirini, Keyes, Joshanloo,

Rostami, & Nosratabadi, 2008). In 2003, a more military perspective of community was offered. 'Community' is an essential experience for the men and women that sacrifice their own security to serve their countries. Separated into sections called, units, members work together to achieve a shared objective. Bowen, Mancini, Martin, Ware, & Nelson (2003) defined Sense of Community as "the degree to which members feel positively attached to the military as an organization and view the base community as a source of support and connection to others..."

Of all the definitions, the 1986 definition provided by McMillan and Chavis has demonstrated strength in both reliability and validity in the last three decades. Furthermore, some definitions are derivatives from the McMillan and Chavis Sense of Community operational definition; for example, the 2003 definition offered above originated from the 1986 definition. Scholars, McMillan and Chavis (1986), defined Sense of Community by an individual's feelings of membership, influence, integration and fulfillment of needs, and shared emotional connection within a perceived community. For this research study, McMillan and Chavis' definition of Sense of Community will be used as the operating theory.

McMillan and Chavis created an index to identify persons' perception of community. The Sense of Community Index includes four scales that total 24 items. As explained by McMillan and Chavis (1986), the four subscales include Membership, Influence, and Integration and Fulfillment of Needs, Shared Emotional Connection. Ten years later, McMillan (1996) renamed the four terms, Spirit, Trust, Trade, and Art.

Membership, one of the original principles, was classified by five attributes: boundaries, emotional safety, a sense of belonging and identification, personal



investment, and a common symbol system. The revised term, *Spirit*, however, places less emphasis on boundaries and more emphasis on friendship. The revision also integrated a new element of emotional safety. Author, McMillan (1996), highlights the importance for members of a community to feel able to “express unique aspects [their] personality. [They need] a setting where [they] can be [themselves] and see [themselves] mirrored in the eyes and responses of others” rather than feeling a burdening responsibility of sacrifice on behalf of the community.

Necessary for emotional safety is *Trust*, the second revised element of Sense of Community. The original term was labeled as Influence. The coauthors, McMillan and Chavis (1986) explain that members are drawn to communities in which they feel influential, yet a significant positive relationship between cohesiveness and conformity exists. Additionally, a member’s influence on the community and a community’s influence of the member should occur simultaneously. In 1996, McMillan suggests that in order for influence to exist, power must be present. Power, however, cannot exist without trust.

McMillan (1996) asserts that in the absence of trust, a sense of community cannot exist. He explains that trust has specific requirements in order for it to be obtained. First, members of the community must know what to expect from one another. Specifically, order must be established through community norms, rules, or laws. This reduces the amount of social confusion and creates cohesion among members. Next, authority must be established within the community. This provides communities with an approach to managing information and making decisions. Authority maintains order and direction.

The final requirement for establishing trust within a community is the concurrent existence of influence between the community and its members.

Integration and Fulfillment of Needs, the third operating principle in McMillan and Chavis' (1986) original theory of sense of community, is simply reinforcement, a primary component of behavioral research. In order for a community to maintain a positive and healthy sentiment of togetherness, its members must find being a part of the community rewarding. Some reinforcements include the status of being a member, competence of other members, and shared values (McMillan & Chavis, 1986). However, the revised term, *Trade*, suggests a more reciprocated relationship between the community and its members. Rather than the members only benefiting from the community, the members also benefit the community through. Trade expresses more of a social economy, where both parties benefit and contribute.

An essential component of the fourth original principle, Shared Emotional Connection, is a shared history. Even if members have not personally experienced or participated in the history, members must identify with the history of the community. The original principle is comprised of seven features: contact hypothesis, quality of interaction, closure of events, shared valent event hypothesis, investment, effect of honor and humiliation on community members, and spiritual bond. The new label, *Art*, can only exist once the first three elements have been secured. The Art principle explains that art is representation of a community's traditions and values. It is a symbolic statement for the community's history. Moreover, "symbols, stories, music, and other symbolic expressions represent the part of a community that is transcendent and eternal" (McMillan, 1996).

Establishing one principle is contingent upon successfully establishing the previous principle. Though the names of each element have been changed, the core is still present. McMillan's intentions were not to change the essence of the Sense of Community theory; instead he sought to "rearrange" the four elements to fit the contemporary experiences of society (McMillan, 1996). The Sense of Community Index, a derivative of the theory, is unchanged and is one of the most widely used measures of sense of community in the social science field. Namely, the creators proudly indicate that it has been used among different cultures, such as North and South America, Asia, and the Middle East, and within varying contexts. The index has a coefficient alpha score of .94, proving to be a very reliable measure. The subscales also proved to be reliable, with coefficient alpha scores ranging from .79 to .86.

A study of single mothers residing in a shelter used the short form of McMillan and Chavis' (1986) Sense of Community Index (Swainson, 1991). The study had three hypotheses, one of which predicted an increased sense of community among residents of the housing cooperative when compared to persons who used other forms of housing. The statistical tests revealed a significant difference between the two groups ( $f(3,88) = 7.78$ ,  $p < .001$ ), confirming an increased Sense of Community (SCI) score for residents of the housing cooperative. Through further analyses, the study discovered a significant positive relationship between SCI and length of residency ( $r = .24$ ,  $p < .05$ ). Although single mothers differ greatly from expatriate populations, their experience in a new place and the correlation between the experience and their perceived sense of community may provide insight to the experiences of expatriates and their perceived sense of community in a foreign land.

More recently, a 2008 study conducted by Cicognani and colleagues assessed the relationship between social participation and Sense of Community and the impact on social well-being. McMillian and Chavis' (1986) Sense of Community Index was used as one of the measures for the study. The study also aimed to assess the relationships between the variables among university students of different backgrounds and experiences. The study observed American, Italian, and Iranian students. The study observed higher SCI scores among American students. American students also yielded higher scores on the well-being measure. There were no significant differences found between Italian students and Iranian students on either measure. This study provides insight on the potential impacts of one's perceived sense of community on their well-being and further exploration of the relationship may be useful.

### **Mental Health and Depression**

Well-being has been classified socially, emotionally, physically, cognitively/psychologically or even spiritually, depending on the scope of the research study (Amato, 2005; McKee et al., 2005; Ellison, 2006). In one research study alone, 13 specific dimensions of well-being were identified (Keyes, 2007). This particular research study will only focus on cognitive or psychological well-being, more specifically, mental health. The World Health Organization (2008) states: "Mental health is not just the absence of mental disorder. It is defined as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community." David Satcher, Surgeon General from 1998 to 2002, defined mental health as "a state of successful performance of mental function, resulting in productive activities, fulfilling

relationships with people, and the ability to adapt to change and to cope with adversity” (U.S. Public Health Service, 1999, as cited in Keyes, 2007).

Keyes (2007) acknowledges that among the definitions of mental health is a component of positivity. In addition to the absence of mental illness is an ability to thrive and flourish in one’s surroundings. Keyes further confirms this in his report of his own research study. The results indicated that completely mentally healthy adults, individuals who are free of a 12-month mental disorder and are flourishing, reported the fewest missed days of work, the fewest half-day or greater work cutbacks, the healthiest psychosocial functioning, the lowest risk of cardiovascular disease, the lowest number of chronic physical diseases with age, the fewest health limitations of activities of daily living, and lower health care utilization (Keyes, 2007).

In 2004, the World Health Organization (WHO) published a summary report on promoting mental health. WHO (2004) documented that mental health has intrinsic value and is essential for the functioning of individuals. Mental health is an important resource for families, communities, and nations as well. It contributes to the economic, human, and social capital of every society. “Mental health can be regarded as an individual resource, contributing to the individual’s quality of life, and can be increased or diminished by the actions of society” (World Health Organization, 2004).

Among the most widely used instruments for assessing mental health and psychological symptoms is the Symptom Checklist-90-Revision (SCL-90-R). It is a psychometric instrument that was created in the mid 1970’s by Derogatis, Lipman, and Covi. The instrument is frequently used among medical and/or psychiatric patients. The measure will be the focal measure for this research study. Though expatriates are

typically not medical and/or psychiatric patients, a literature review indicated that the instrument has been used as a measure of overall psychological distress in a number of studies (Dyrbye, Thomas, & Shanafelt, 2006). Furthermore, the creator of the inventory identified community populations as a normative sample. He stated, “it is designed to be appropriate for use with individuals from the community, as well as individuals with either medical or psychiatric conditions” (Derogatis & Unger, 2010). Thus, the SCL-90-R will be used as an indicator for a dimension of mental health.

The psychometric instrument has 90 items with nine unique dimensions. The nine dimensional structures include Somatization (SOM), Obsessive-Compulsive (OBS), Interpersonal Sensitivity (INT), Depression (DEP), Anxiety (ANX), Hostility (HOS), Phobic Anxiety (PHOB), Paranoid Ideation (PAR), and Psychoticism (PSY). Somatization is identified as a reflection of distress based on one’s perceptions of bodily dysfunction. The Obsessive-Compulsive component focuses on thoughts, impulses, and actions that are seemingly irresistible and incessant. Interpersonal Sensitivity highlights feelings of inadequacy and inferiority, often marked by self-deprecation and self-doubt. The Depression component of the instrument seeks out symptoms of dysphoric mood and affect, signs of withdrawal of life interest, lack of motivation, and loss of energy. Signs of nervousness, tension, trembling, apprehension, dread, terror, and panic all compose the Anxiety component of the instrument. Signs of thoughts, feelings, and actions related to negative anger comprise the Hostility component. The Phobic Anxiety dimension is defined by a persistent fear of a person, place, object, or situation, which is disproportionate to any actual threat; as a result of this fear, avoidance behavior or escape behavior surfaces. Paranoid Ideation can be classified as a disordered mode of thinking,

which reflect projective thought, hostility, grandiosity, suspiciousness, centrality, and fear of loss of autonomy. According to a webinar series held by Leonard Derogatis, PhD, “Psychoticism was designed to represent the construct as a continuous dimension, from a withdrawn isolated lifestyle at one pole to demonstrable psychotic behavior at the other. The measure attempts to reflect a graduated continuum from mild social alienation to first-rank symptoms of psychosis.” Among the nine dimensions, only the depression scale will be used to assess the mental health of the target population. The depression score comprises of 13 items.

As presented in a comparative psychometric analysis, the Symptom Checklist-90-Revised is proven reliable with coefficient alpha scores ranging from .74 to .97, inclusive of the Global Severity Index and all nine dimensional structures (Prinz, Nutzinger, Schulz, Petermann, Braukhaus, & Andreas, 2013). In a study seeking to assess the reliability of the SCL-90-R when distributed electronically and physically, the instrument yielded high reliability scores. Specifically, the Cronbach alpha of the Depression scale was .88 and .92 for the paper-and-pencil and electronic versions, respectively (Vallejo, Jordán, Díaz, Comeche, & Ortega, 2007).

### **Sense of Community and Depression**

In addition to the implicit connections made between community and mental health in the above states definitions of mental health, empirical studies have also indicated a relationship. The pioneering research study by Riger and Lavrakas (1981) not only revealed the importance of community for alleviation of stress, but also emphasized its ability to promote mental health, or “mental well-being”. Recent empirical evidence confirms the relevance of Riger and Lavrakas’ 1981 study. In the last fifteen years,

continue to find a positive correlation between community and mental health (Berkman & Glass, 2000; Fisher, 2002; Chipuer et al., 2004; Cicognani et al., 2008). Social epidemiologists have validated that community connections, sense of belonging, networks, cohesive relationships, and social capital all play a significant role in health, well-being, and mental health outcomes (Cicognani, Pirini, Keyes, Joshanloo, Rostami, & Nosratabadi, 2008).

The challenges that expatriates are often faced with can cause substantial stress and may even impact them psychologically (Lei, Liang, & Krieger, 2004; Carraher, Sullivan, & Carraher, 2005; Brockner, 2006; Jackson, 2014; Razak, Ibrahim, Ridzuan, Talib, & Kedin, 2014). The process of expatriation can be a major stressor for expatriates (Gedro, Mizzi, Rocco, & van Loo, 2013). According to Psychologist, Constance Hammen, there is a “robust and causal” relationship between stressful life events and depression (Hammen, 2005). This research emphasizes chronic stress, stress that occurs over an extended period of time. Hammen’s research explains that chronic stress, similar to an expatriates’ experience of stress, is a strong predictor of depressive symptoms.

Depression was found in expatriates who found it difficult to mediate their stress and interact within their host country effectively (Rainoldi & Golzner, 2012). Rostamzadeh, Anantharaman, & Tong (2012), noted that compared to the Malaysian community, expatriates living in Malaysia can be expected to have higher levels of depression and other psychological disorders and have difficulties with interpersonal relationships. These researchers were particularly interested in their ‘psychological adjustment,’ which was signified as increased effectiveness in the workplace, satisfaction with the new location, and reduced stress or lack of depression (Rostamzadeh,



Anantharaman, & Tong, 2012). These articles indicate that depression is a concern for the expatriate community.

One of the concerns for expatriates living in a foreign country may be the difficulty to access mental health services. Koreans and other Asians have proven less likely to use mental health services when coping with stress compared to Americans (Taylor, Sherman, Kim, Jarcho, Takagi, & Dunagan, 2004), indicating a more apprehensive approach to mental healthcare within the Korean community. Additionally, even when mental health services are offered, barriers in accessibility, language, and cultural training may still exist (Kronfol, 2012). Thus, it is important to seek innovative, non-clinical ways to prevent and mediate depression among expatriates living in South Korea. This project aims to explore the possibility of sense of community serving as a moderating variable for expatriates' depression levels.

### **Mental Health and Positive Adaptation**

Expatriates' positive adaptation, or 'psychological adjustment,' has been assessed by an individual's ability to maintain a positive mental health status. Specifically, psychological adaptation includes the absence of depression and anxiety (Berry, 1997, as cited by Rostamzadeh, Anantharaman, & Tong, 2012). An expatriates' inability to adjust to the host country is among the major reasons for an early return or assignment termination (Rivera, Neumann, & Mardones, 2003; GMAC, 2007).

## CHAPTER III: METHODOLOGY

### **Pilot Study**

The pilot study consisted of twenty consenting participants who were expatriates of the Republic of Korea. Participants residing in the Greater Seoul area were specifically targeted. However, there were some participants residing outside of Seoul. All participants were informed that the research study is confidential and anonymous. They were then provided a questionnaire packet that included the Sense of Community Index-2 (SCI-2), Symptom Checklist-90-Revised (SCL-90-R), and a Demographics Questionnaire. Participants average response time was twenty minutes.

The original study design focused on the racial backgrounds of expatriates. It sought to identify which racial group of expatriates experiences a deeper Sense of Community in Korea compared to South Korean Nationals. Additionally, the study's target population was too broad, as it included ethnic expatriates, Asian migrant workers, and North Korean refugees. By limiting the study to participants in the Seoul area, the study would have only had the potential to reach about 20% of the foreign population in Korea, therefore the revised design was not limited to participants in the Greater Area. Moreover, the original design was too time consuming for both the researcher and the participants.

The pilot study revealed that the current study would be more effective if simplified. Therefore, migrants and refugees were excluded from the definition of an expatriate and South Korean Nationals were removed from the target population. Expatriates of all racial backgrounds were included in the study. While the SCL-90-R tests for a number of mental disorders, only items specifically testing for depression were

included in the final version of the questionnaire packet. Some questions from the original demographics questionnaire were also removed, as they were found unnecessary. The final revision to the study design was the creation of an online version of the survey. Survey Monkey, an online software, was used to reach a larger population base at a faster rate.

### **Focus Group**

The focus group consisted of five expatriates currently living in South Korea were interviewed. Of the five focus group participants, three were from America, while two were from Canada. The initial design of the project incorporated physical interviews, however due to location restraints, the design was modified. In order to accommodate the focus group participants, phone interviews were conducted. Previous research has shown no significant difference in results between interviews conducted face-to-face and interviews conducted over-the-phone, thus indicating that telephone interviews are equally productive for qualitative research (Sturges & Hanrahan, 2004).

The purpose of the focus group was to create a comprehensive definition of “the Korean community” based on expatriates’ experiences in South Korea. The interviews began with open-ended questions and subsequent questions were asked based on the direction of participants’ responses, as suggested by Thomas (2011). Three initial pre-determined questions were asked, 1) “How do expatriates define community?” 2) “How do expatriates define the Korean community?” and 3) “How do expatriates interact with or experience the Korean community?” Participants were told to answer the above listed questions based on their experiences. Follow-up questions usually included simple questions such as, “Why?” or “Why not?” and “Can you explain using more detail?”

Comprehensive notes were written to record the responses of the participants. For additional information on the focus group responses, refer to Table 1.

### **How Do Expatriates Define Community?**

Found in each participants' definition of 'community' was the reference of a group with similar interests. Participants stated that a community is a group of people who support each other, share experiences together, and interact on varying levels.

### **How Do Expatriates Define the Korean Community?**

Many of the participants indicated that the Korean community is a sub-group of a more general community. Specifically, participants explained that the Korean community is embodied by the characteristics of a broader community, which is made up of Korean individuals. One difference, mentioned by most participants, in the Korean community, however, is that the core of the Korean community is extremely hierarchal. This fundamental experience, not as prevalent common in Western cultures, not only defines the experiences of expatriates living in Korea but also creates a separation between "the Korean community" and expatriates living in Korea.

### **How Do Expatriates Interact With or Experience the Korean Community?**

As a result of the hierarchal structure of the Korean community, participants expressed that they felt an "us" versus "them" mentality from members of the Korean community. Many participants explained that the Korean community was an exclusive experience that they could never be part of. A 33-year-old female participant stated that discrimination is a common experience of expatriates living in Korea and said, "You will have problems if you are not Korean."

Table 1. Focus Group Responses About the Korean Community.

	<b>Definition of Community</b>	<b>Definition of the Korean Community</b>	<b>Experiences with the Korean Community</b>
001	Bonding experience Sharing experience Close, tight-knit group	Hierarchal structure Exclusive of foreigners Koreans stick together Discrimination	Some expats want to absorb the culture, some don't  Positive experiences with coworkers
002	People see/interact with daily Sense of interconnectivity Mutual support	Family and hierarchy Holds onto old traditions Committed to Respect	Not many experiences with the Korean community Usually through work Always in English
003	Collection of friends Common bonds Strengthen one another	Difficult to get into the circle Very protective of their community	Usually professional in nature, not often social
004	People with like interests	Everyone that is Korean Separation: "us-them"	"Expats' perception of the Korean community both determines and is based on <i>experience</i> ."
005	People willing to help each other, answer questions, and act as friends and family	A hierarchal system	Easier for expats to stay within the expat community and no interact with Koreans  Feeling of "othering"

Note: Numbers represent focus group participants.

## Research Design

Figure 2. Flow Chart of the Study Design.

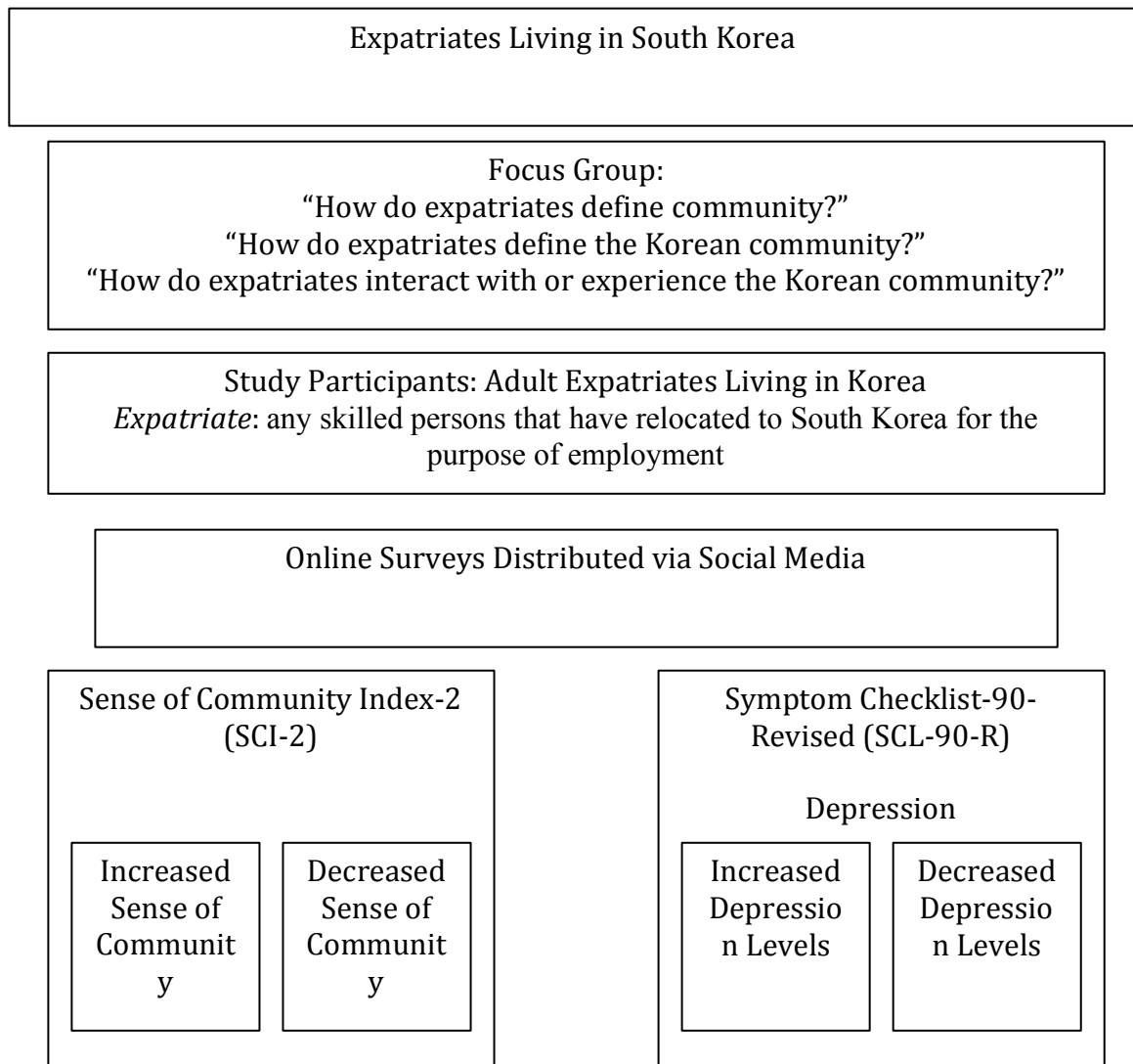
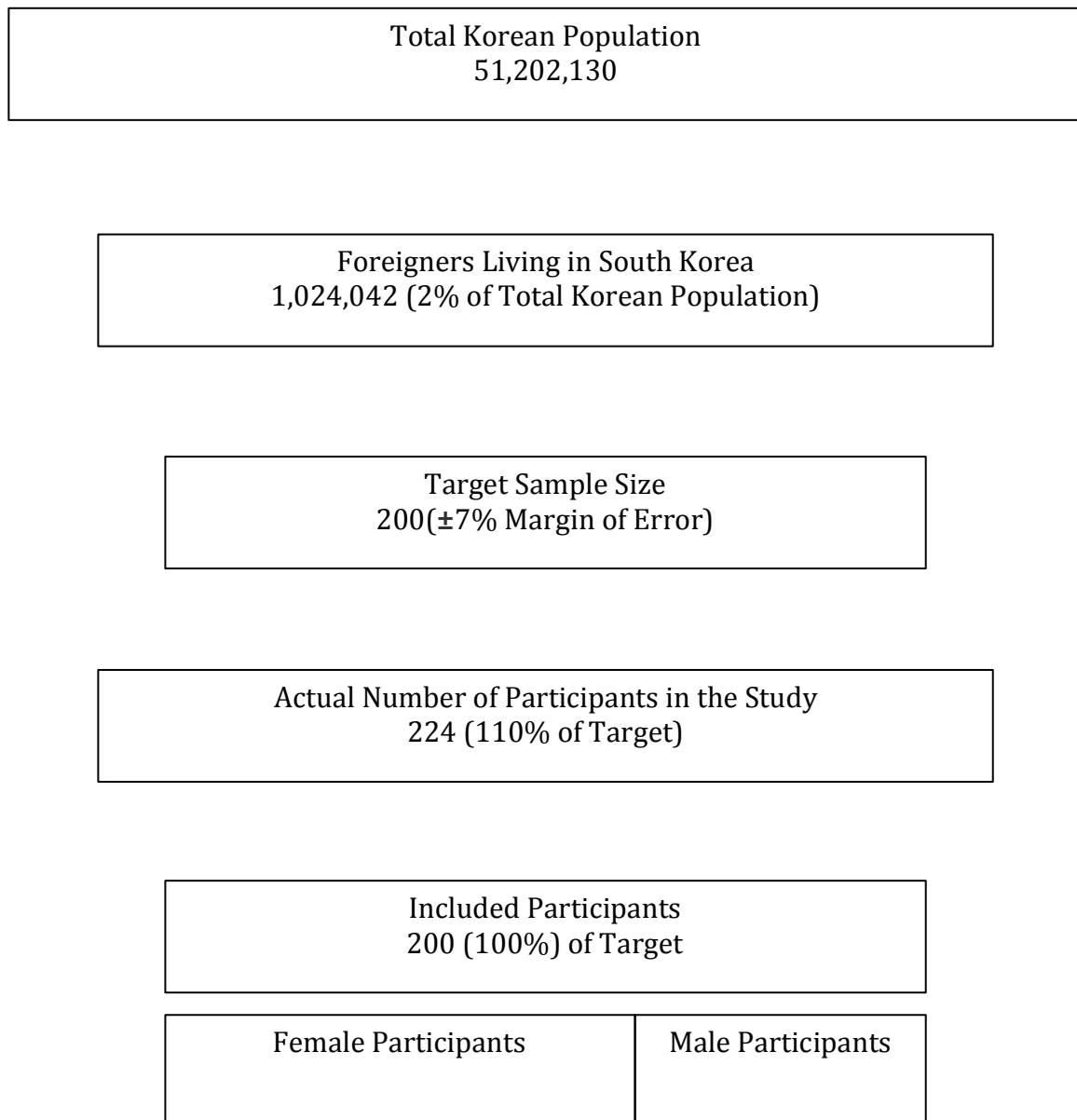


Figure 1. Flow Chart of Study Sample.



## **Recruitment**

Participants were recruited via social networks and were invited to complete an online version of the survey. They were told that the study's purpose is to learn more about the experiences, connections, and health statuses of expatriates living in South Korea. If they agreed to participate, they were electronically given an informed consent form (see Appendix A) and given a full explanation of the confidentiality and anonymity of the study. Participants were asked to electronically sign by checking a box, indicating that they understood and agreed to participate in the study. Participants were told that there is no right or wrong answer and that their responses should be based on their own opinion. Materials, which included the Sense of Community Index-2 (SCI-2), depression items from the Symptom Checklist-90-Revised (SCL-90-R), and a Demographics Questionnaire, were then given to the participant for them to complete (see Appendixes B, C, and D). After completion of the questionnaire, participants were thanked for their time and contribution to research.

## **Participants**

Two hundred participants were targeted for this study. Currently, there are about 1,024,042 expatriates residing in South Korea. Based on this number, an appropriate margin of error was calculated. In order to obtain a margin of error of 7 percent, 204 participants are needed. This sample size represents about 0.02% of expatriates residing in South Korea.

Participants could represent any racial background or nationality as long as they were not citizens of the Republic of Korea. All participants were required to be physically living and working in the Republic of Korea (South Korea) at the time the



questionnaire was completed. Respondents also had to be over 21 years of age in order to participate in the study. Following recruitment, a sample of 224 expatriates participated in the research project. Specifically, 200 questionnaires out of the 224 met the inclusion criteria for this study. Participants were automatically excluded if they did not fall under the guidelines of this study's definition of an expatriate.

**Age.** Participants selected to participate in the study represented a wide range of age groups. However, all participants were above the age of 21 years old, as it was a requirement for participation. The mean age was 32 years old. Thirty-eight participants (19.00%) were between the ages of 21 and 25. The majority of the participants, sixty-nine (34.50%), were in the 26-30 age group. Forty-three participants (21.50%) were 31-35 years of age and twenty-one participants (10.50%) were 36-40 years of age. Thirteen participants (6.50%) were between 41-45 years of age and between 46-50 years of age, respectively. The remaining three participants (1.50%) were over the age of 51.

Age can serve as an important indicator for one's mental health status and successful adjustment of expatriates. Studies conducted by numerous researchers indicate an inverse correlation between age and depression (Gottlieb et al., 2004; Kessler et al., 2004; Lo et al., 2010; Wild et al., 2012). Additionally, the Korean society is largely operated by a hierarchal system, with much of it being defined by age. Although expatriates are not directly held responsible for following the unwritten laws of hierarchy in Korea, the hierarchal structure may indirectly impact them.

**Gender.** The study consisted of both male and female participants. Just as males and females have varied life experiences, the same can be true for their ability to adapt

successfully to a new culture. This is especially true in Asian societies that have comparably stringent hierarchies and infrastructures.

The study included 141 (70.50%) female participants and 59 (29.50%) male participants. Although the initial research design sought to obtain a 50% ratio of each gender, the larger percentage of female participants may, in fact, be more reflective of the true expatriate population in South Korea. Compared with men, women tend to expatriate in higher numbers (Tharenou, 2010), deeming the imbalanced percentages acceptable for this study.

**Marital Status.** Participants were asked to indicate whether or not they were single, married, divorced, or widowed. None of the participants in this study are widowed. One hundred thirty-five participants (67.50%) are single and sixty participants (30.00%) are married. Only five participants (2.50%) indicated being divorced.

Marital status was included in the demographics questionnaire in order to identify its potential associations with depression among expatriates. The experiences of a married expatriate vary drastically from those of a single expatriate and this study aims to explore the potential outcomes of those differences. A research study interested in the adjustment of Western expatriates living in Taiwan found that married expatriates showed significantly higher levels of adjustment compared to single or separated expatriates (van Oudenhoven, Mol, & Van der Zee, 2003). However, marital status is not ‘universally beneficial’ or a guaranteed mediator for mental health. Evidence from a recent study explains that “support from one’s network does not compensate for the effect of being single” (Holt-Lunstad, Birmingham, & Jones, 2008). Therefore, this study

is interested in investigated the potential effects that marital status has on expatriates' living in Korea mental health status, identified through depression.

**Educational Background.** Participants were given five different options to choose from in regards to their educational background. They were asked to select their highest educational level, ranging from “less than a high school diploma” to “Doctorate Degree.” Of the five levels, 124 participants' (62.00%) highest level of education was a Bachelor's Degree. Sixty-eight participants (34.00%) had obtained their Master's Degree and five participants (2.50%) had received their Doctorate Degree. Three participants' (1.50%) highest level of education was a high school diploma. No participants had received an education lower than a high school diploma.

**Working Hours.** Participants working hours ranged from 3 hours per week to 65 hours per week. The mean working time was 37 hours per week, as the majority (44.00%) of the participants stated that they worked between 31 and 40 hours per week. Following closely behind, fifty-eight participants (29.00%) indicated working 41 or more hours per week. Twenty-three participants (11.50%) indicated that they work 20 hours or less per week and thirty-one participants (15.50%) noted that they work between 21 and 30 hours weekly.

**Monthly Income.** Participants' income ranged from 1 million South Korean Won per month to 15 million Korean Won per month. The mean monthly income was 2.8 million Won, as the majority (48.50%) of the participants' monthly income fell between 2 and 2.5 million Won. Forty-one participants (20.50%) made between 2.6 and 3 million Won each month and thirty-three participants (16.50%) made more than 3 million Won each month. Twenty-nine participants (14.50%) made less than 2 million Won on a

monthly basis. It should be noted that the exchange rate at the time the questionnaire was disseminated (October 2014) was 940.47 U.S. Dollars for 1 million South Korean Won.

These figures do not include money that has been sent home to support other family members, pay off debts, or save financially. Though the cost of living in Korea is seemingly low when compared with the cost of living in Western societies, financial struggles may still exist within the expatriate population. Furthermore, Expatriates' income may be a great predictive variable for mental health status and successful adaptation (Ali, Van der Zee, & Sanders, 2003).

**Length of Stay.** Participants were asked to indicate how long they have been living in South Korea. Very few participants (17.17%) have been living in Korea for less than a year (14 participants selected 0-6 months and 20 participants selected 6-12 months). Only 34 participants (17.17%) have been living in Korea for 1-2 years, compared to 81 (40.91%) participants having lived in Korea for 2-5 years. Forty-nine participants (24.75%) indicated that they have been living in Korea for more than five years.

A meta-analysis of predictors of 'psychosocial adjustment' among international students in the United States was conducted. Among 64 published studies in a 20-year period, extended length of stay was found to be a predictor for successful adaptation in the host country (Zhang & Goodson, 2011). In this research study, the length of stay of expatriates living South Korea may be a predictor of mental health levels, implying their ability to adjust successfully.

**Language Acquisition.** The study included expatriates with Korean language skills that ranged from "Not at all" to "Fluent." Specifically, 32 participants (16.00%)

indicated that they could not speak the Korean language at all. However, 114 participants (57.00%), the majority of the participants, indicated that their language skills were at a “survival” level. Forty-seven participants (23.50%) stated that they were “proficient” in the language, and only seven participants (3.50%) specified that they were “fluent” in Korean.

Language Acquisition can serve as an indicating variable for Sense of Community and cross-cultural adaptability. A study conducted in China indicated the positive association with expatriates’ proficiency in the nation’s language and positive social adjustment (Selmer, 2006). A 2010 study conducted by Peltokorpi revealed that insufficient host country language proficiency could serve as a barrier to effective and positive interactions with members of the host community, while a sufficient proficiency level may have a reverse effect. Additionally, the same study revealed that Western expatriates living in linguistically distant countries (Japan was used as an example) find difficulty in mastering the language. These findings underline the relevance of identifying expatriates’ language acquisition level and may, furthermore, explain racial differences found in this particular research study.

**Nationality.** Participants were asked to indicate their nationality by typing it on a blank line. Eight nationalities were provided and they were condensed into four groups. All participants from the United States of America and Canada were put into two separate groups. Participants from all European countries were placed into a third category, and all other nationalities were grouped together in a fourth category. Of 200 participants, 199 chose to specify their nationality. One hundred thirty-one participants (65.83%) indicated being an American and twenty-nine participants (14.57%) indicated being from Canada.

Twenty-one participants (10.55%) were from a European nation. Eighteen participants (9.05%) were from other nations such as South Africa and New Zealand.

### **Instruments**

Institutional Review Board (IRB) approval was obtained prior to conducting this research study and distributing the questionnaires.

#### **Sense of Community Index-2 (SCI-2)**

The SCI-2 begins with the question, “How important is it to you to feel a sense of community with other community members?” Responses range from 1 “Prefer Not to be Part of This Community” to 6 “Very Important”. This is a validating question, which can be used to help interpret results and may be correlated with the total sense of community. The following 24 items are statements about one’s experience with the community in question, the Korean community. Each statement requires participants to indicate how they feel about the community by selecting one of four responses: 0 “Not At All”, 1 “Somewhat”, 2 “Mostly”, and 3 “Completely”.

#### **Symptom Checklist-90-Revised (SCL-90-R)**

The SCL-90-R includes a list of problems and complaints that people sometimes experience, encouraging respondents to answer according to how much they have experienced in the past week, including the day the questionnaire was completed. Respondents are able to answer using a 5-point Likert scale, ranging from 0, “not at all”, to 4, “extremely”.

#### **Demographics Questionnaire**

The Demographics Questionnaire consisted of 9 items. Participants were asked to provide information about their age, gender, marital status, and nationality. Questions

also asked for information regarding participants' highest education level, monthly income, and weekly work hours. Participants were asked to answer questions about how long they've been living in Korea and their ability to speak the Korean language as well.

### **Data Analysis**

First, descriptive statistics were performed to examine means, standard deviations, and internal consistencies for all variables. Frequencies of each demographic variable were also observed in exploration of participant characteristics. The chi-square test and a logistic regression analysis was performed in order to assess the correlation between Sense of Community scores on the SCI-2 and depression scores on the SCL-90-R. A value of  $P < .05$  was considered statistically significant. All analyses were performed using the 9.2 version of Statistical Analysis Software (SAS) database.

## CHAPTER IV: RESULTS

*Table 2.* General Characteristics of Study Participants.

<b>Variable</b>	<b>Frequency</b>	<b>Percent (%)</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent (%)</b>
<b>Age</b>				
21 – 30	107	53.50	107	53.50
31 – 35	43	21.50	150	75.00
36 – 40	21	10.50	171	85.50
41 – 45	13	6.50	184	92.00
46 – 50	13	6.50	197	98.50
41 – 61	3	1.50	200	100.00
<b>Gender</b>				
Female	141	70.50	141	70.50
Male	59	14.50	200	100.00
<b>Marital Status</b>				
Single	135	67.50	135	67.50
Married	60	30.00	195	97.50
Divorced	5	2.50	200	100.00
<b>Nationality</b>				
American	131	65.83	131	65.83
2	29	14.57	160	80.40
4	39	19.60	199	100.00
<b>Length of Stay in Korea</b>				
0 – 6 months	14	7.07	14	7.07
6 – 12 months	20	10.10	34	17.17
1 – 2 years	34	17.17	68	34.34
2 – 5 years	81	40.91	149	75.25
5+ years	49	24.75	198	100
<b>Language Acquisition</b>				
Not At All	32	16.00	32	16.00
Survival	114	57.00	146	73.00
Proficient	47	23.50	193	96.50
Fluent	7	3.50	200	100.00



Table 2. General Characteristics of Study Participants (continued).

Variable	Frequency	Percent (%)	Cumulative Frequency	Cumulative Percent (%)
<b>Education</b>				
High School Diploma	3	1.50	3	1.50
Bachelor's Degree	124	62.00	127	63.50
Master's Degree	68	34.00	195	97.50
Doctorate Degree	5	2.50	200	100.00
<b>Working Hours</b>				
Part-time (<40 hours)	143	71.50	143	71.50
Full-time (≥40 hours)	57	28.50	200	100.00
<b>Monthly Income</b>				
<2 million Korean Won	29	14.50	29	14.50
2-2.5 million Korean Won	97	48.50	126	63.00
≥2.6 million Korean Won	74	37.00	200	100.00

The highest possible score for the SCI-2 was a total of 72 points. One hundred twenty seven participants (63.50%) scored between 21 and 40. Twenty-nine participants (14.50%) indicated a lower sense of community, scoring between 0 and 20. Forty-four participants, however, demonstrated a greater sense of community, as they scored between 41 and 70 (Table 3).

The highest possible score for the SCL-90-R was a total of 50 points. The majority of the participants also demonstrated relatively low scores on the SCL-90-R. Specifically, 111 of the 200 participants (55.50%) scored between 0 and 10 on the depression scale, with the highest possible score being 50. Fifty participants (25.00%) scored between 11 and 20. Nineteen participants (9.50%) scored between 21 and 30. Participants (180 in total) who scored between 0 and 30 made up ninety percent of the total study sample. Fifteen participants (7.50%) demonstrated increased depression scores, as they scored between 31 and 40. Five participants (2.50%) scored the highest, falling between 41 and 50 (Table 3).

*Table 3.* Sense of Community Index-2 and Symptom Checklist-90-Revised (Depression) Total Scores.

<b>Variable</b>	<b>Frequency</b>	<b>Percent (%)</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent (%)</b>
<b>SCI-2</b>				
0 – 20	29	14.50	29	14.50
21 – 40	127	63.50	156	78.00
41 – 70	44	22.00	200	100.00
<b>SCL-90-R (Depression)</b>				
0 – 10	111	55.50	111	55.50
11 – 20	50	25.00	161	80.50
21 – 30	19	9.50	180	90.00
31 – 40	15	7.50	195	97.50
41 – 50	5	2.50	200	100.00

In observing potential correlations with depression scores on the SCL-90-R, total scores on the SCI-2 were statistically insignificant. Additionally, the majority of the demographic variables in association with depression scores were not statistically significant. Depression scores on the SCL-90-R were significantly associated with participants' nationality and educational background. While a significant p-value was set to 0.05, the p-value (0.0522) for the age and depression chi-square test was nearly statistically significant (Table 4).

Table 4. Factors Associated with Depression Among Expatriates in South Korea.

Variables	Low Dep.	High Dep.	Total	$\chi^2$	P-Value
	N (%)	N (%)	N (%)		
<b>Age</b>				3.7687	0.0522
21 – 40	151 (75.50)	20 (10.00)	171 (85.50)		
41 – 61	29 (14.50)	0 (0.00)	29 (14.50)		
<b>Gender</b>				2.2465	0.1339
Female	124 (62.00)	17 (8.50)	141 (70.50)		
Male	56 (28.00)	3 (1.50)	59 (29.50)		
<b>Marital Status</b>				1.5828	0.2084
Single	119 (59.50)	16 (8.00)	135 (67.50)		
Married/Divorced	61 (30.50)	4 (2.00)	65 (32.50)		
<b>Nationality</b>				6.5944	0.0102
American	123 (61.81)	8 (4.02)	131 (65.83)		
Other	56 (28.14)	12 (6.03)	68 (34.17)		
<b>Length of Stay</b>				1.8397	0.3986
0 – 12 months	34 (22.52)	2 (1.320)	36 (23.84)		
1 – 2 years	31 (20.53)	3 (1.99)	34 (22.52)		
2+ years	70 (46.36)	11 (7.28)	81 (53.64)		
<b>Language Acquisition</b>				1.9054	0.1675
Not At All/Survival	134 (67.00)	12 (6.00)	146 (73.00)		
Proficient/Fluent	46 (23.00)	8 (4.00)	54 (27.00)		
<b>Education</b>				4.4320	0.0353
High Sch./Bachelor's	110 (55.00)	17 (8.50)	127 (64.50)		
Master's/Doctorate	70 (35.00)	3 (1.50)	73 (36.50)		
<b>Working Hours</b>				0.0245	0.8755
Part-time	129 (64.50)	14 (7.00)	143 (71.50)		
Full-time	51 (25.50)	6 (3.00)	57 (28.50)		
<b>Monthly Income</b>				0.5280	0.7680
<2 million won	27 (13.50)	2 (1.00)	29 (14.50)		
2 – 2.5 million won	86 (43.00)	11 (5.50)	97 (48.50)		
>=2.6 million won	67 (33.50)	7 (3.50)	74 (37.00)		
<b>SCI-2 Scores</b>				0.000	1.000
0 – 48	162 (81.00)	18 (9.00)	180 (90.000)		
49 – 70	18 (9.00)	2 (1.00)	20 (10.00)		

Nationality and educational background were found to be significantly associated with depression. Specifically, a p-value of 0.0138 indicated that participants who were not American were 3.3 times more likely than Americans to have higher depression levels (95% CI, 1.28 – 8.51). Additionally, a p-value of 0.0466 indicated that compared to those with a Master's or Doctorate Degree, people with a high school diploma or Bachelor's Degree are 3.6 times more likely to have higher depression levels (95% CI, 1.02 – 12.76) (Table 5).

*Table 5. Unadjusted Association of Depression Among Expatriates in South Korea Using Logistic Regression Analysis.*

<b>Variable</b>	<b>N</b>	<b>OR (95% CI)</b>	<b>P-value</b>
<b>Age</b>			
21 – 40	171	1.00	
41 – 60	29	<0.001 (<0.001 - >999.999)	0.9597
<b>Gender</b>			
Female	141	1.00	
Male	59	0.391 (0.110 – 1.388)	0.1462
<b>Marital Status</b>			
Single	135	1.00	
Married/Divorced	65	0.488 (0.156 – 1.522)	0.2163
<b>Nationality</b>			
American	131	1.00	
Other	68	3.295 (1.276 – 8.509)	0.0138
<b>Length of Stay</b>			
0 – 12 months	36	1.00	
1 – 2 years	34	1.645 (0.258 – 10.506)	0.5988
2+ years	81	2.671 (0.561 – 12.729)	0.2174
<b>Language Acquisition</b>			
Not at All/Survival	146	1.00	
Proficient/Fluent	54	1.942 (0.747 – 5.048)	0.1732
<b>Education</b>			
High Sch./Bachelor's	127	3.606 (1.019 – 12.757)	0.0466
Master's/Doctorate	73	1.00	
<b>Working Hours</b>			
Part-time (<40 hours)	143	1.00	
Full-time (>=40 hours)	57	1.084 ( 0.395 – 2.976)	0.8756
<b>Monthly Income</b>			
<2 million won	29	1.00	
2 – 2.5 million won	97	1.727 (0.360 – 8.279)	0.4946
>= 2.6 million won	74	1.410 (0.275 – 7.226)	0.6799
<b>Sense of Community</b>			
0 – 48	180	1.00	
49 - 72	20	1.000 (0.214 – 4.664)	1.0000

A stepwise logistic regression analysis was conducted. The significance level was set to 0.2. Of five variables, two were allowed to enter the model: nationality and gender. Of the two, only nationality was found to have a significant association with depression scores on the SCL-90-R. Compared to Americans, non-Americans were 3.3 times more likely to have increased depression scores (95% CI, 1.25 – 8.73;  $p = 0.0161$ ). The  $p$ -value for gender was not statistically significant (Table 6).



*Table 6.* Adjusted Association of Depression Among Expatriates in South Korea Using Logistic Regression Analysis.

Variable	N	OR (95% CI)	P-value
Gender			
Female	141	1.00	0.0993
Male	59	0.335 (0.091 – 1.230)	
Nationality			
American	131	1.00	0.0161
Other	68	3.302 (1.248 – 8.734)	

In order to ensure that participants' nationality is not confounded by demographic variables, a chi-square test was run. In observing potential correlations with nationality, most variables were found statistically insignificant. Educational background was the only variable found to be associated with nationality (Table 7).

Table 7. Factors Associated with Nationality Among Expatriates in South Korea.

Variables	American	Non-Amer.	Total	$\chi^2$	P-Value
	N (%)	N (%)	N (%)		
<b>Age</b>				1.5191	0.2178
21 – 40	109 (54.77)	61 (30.65)	170 (85.43)		
41 – 61	22 (11.06)	7 (3.52)	29 (14.57)		
<b>Gender</b>				1.5786	0.2090
Female	96 (48.24)	17 (8.50)	141 (70.50)		
Male	56 (28.00)	3 (1.50)	59 (29.50)		
<b>Marital Status</b>				0.1490	0.6995
Single	87 (43.72)	47 (23.62)	134 (67.34)		
Married/Divorced	44 (22.11)	21 (10.55)	65 (32.66)		
<b>Length of Stay</b>				1.8397	0.3986
0 – 12 months	34 (22.52)	2 (1.320)	36 (23.84)		
1 – 2 years	31 (20.53)	3 (1.99)	34 (22.52)		
2+ years	70 (46.36)	11 (7.28)	81 (53.64)		
<b>Language Acquisition</b>				0.5093	0.4755
Not At All/Survival	94 (47.24)	52 (26.13)	146 (73.37)		
Proficient/Fluent	37 (18.59)	16 (8.04)	53 (26.63)		
<b>Education</b>				4.6387	0.0313
High Sch./Bachelor's	76 (38.19)	50 (25.13)	126 (63.32)		
Master's/Doctorate	55 (27.64)	18 (9.05)	73 (36.68)		
<b>Working Hours</b>				0.2386	0.6252
Part-time	92 (46.23)	50 (25.13)	142 (71.36)		
Full-time	39 (19.60)	18 (9.05)	57 (28.64)		
<b>Monthly Income</b>				3.2004	0.2019
<2 million won	22 (11.06)	6 (3.02)	28 (14.07)		
2 – 2.5 million won	59 (29.65)	38 (19.10)	97 (48.74)		
>=2.6 million won	50 (25.13)	24 (12.06)	74 (37.19)		

Since educational background was the only variable significantly associated with nationality, it was included in the final model for logistic regression. Age was also included in the model, as age is typically a confounding variable. The final model consisted of nationality, educational background, and age. In the final model, nation was the only variable found statistically significant with a significance level set to .05. This allows a more strong and confident argument that participants' nationality and depression are associated. Specifically, the research indicates that Americans are 2.8 times more likely to have increased levels of depression compared to non-Americans (Table 8).

*Table 8.* Final Adjusted Association of Depression Among Expatriates in South Korea Using Logistic Regression Analysis.

<b>Variable</b>	<b>N</b>	<b>OR (95% CI)</b>	<b>P-value</b>
<b>Age</b>			
21 – 40	171	1.00	
41 – 60	29	<0.001 (<0.001 - >999.999)	0.9587
<b>Nationality</b>			
American	131	1.00	
Other	68	2.817 (1.070 – 7.416)	0.0360
<b>Education</b>			
High Sch./Bachelor's	127	2.350 (0.645 – 8.561)	0.1951
Master's/Doctorate	73	1.00	

## CHAPTER V: DISCUSSION

The original project involved exploring nine different mental health disorders using the Symptom Checklist-90-Revised: Somatization (SOM), Obsessive-Compulsive (OBS), Interpersonal Sensitivity (INT), Depression (DEP), Anxiety (ANX), Hostility (HOS), Phobic Anxiety (PHOB), Paranoid Ideation (PAR), and Psychoticism (PSY). However, the pilot study revealed that the exploration of depression alone would be more effective for the current project. Rather than using a different measure of depression, such as the Beck Depression Inventory (BDI), the SCL-90-R was used. The original BDI was created in 1961, whereas the SCL-90-R was created nearly two decades later, in the mid 1970's. While the BDI is a more common scale of depression, the SCL-90-R is a more recent scale. The study of community is also a newer field of study. Utilizing a more recent scale to explore a more recent field may provide more social relevance.

Although the SCL-90-R is a more recent tool of measurement, depression continues to be a problem among varying expatriate populations. In countries on varying continents, studies have revealed that expatriates are at a greater risk for depression than less nomadic populations (Cardozo et al, 2005; Oei et al., 2007; Al-Abdulla, 2011; Truman et al., 2011). Not much research was found, however, on expatriates residing in South Korea. Even less research was found in relation to depression and/or sense of community and expatriates living in South Korea.

### **Discussion of Findings**

However, this particular study revealed a significant difference in depression levels among Americans and non-Americans. Specifically, non-Americans, to include other Westerners, were 3.3 times more likely to experience higher levels of depression

compared to American participants. While variables, such as age, gender, educational background, or even sense of community, did not prove to be statistically significant, nationality can provide plentiful explanations for the differences found in depression levels.

One possible explanation for higher depression scores, and possibly even lower sense of community scores, may be found in participants' affiliation with the military. While the questionnaire did not screen for military affiliates, it is very likely that they were included in the study's sample of American participants. Per an announcement in January 2014 by American Secretary of State, John Kerry, the Republic of Korea hosts 29,300 American troops in the country. More specifically, roughly 30,000 American soldiers, 2% of the total foreigner population, are residing in South Korea (Glaser, 2014). Another explanation for the results may include the possibility that American expatriate participants were more accustomed to relocating and adjusting to a new culture and country. Lastly, the American population in South Korea is quite large, providing the opportunity for socialization with people from a familiar background. This may also explain why American participants indicated a low sense of community within the Korean community.

### **Recommendations for Future Research**

This study's results allow room for further explanation of differences in American expatriates living in Korea and expatriates of other nationalities living in Korea. Future studies may observe differences among expatriates of varied nationalities compared with Korean nationals, which may provide an interesting measure of control. Additionally, future research can specifically screen for expatriates that work with non-military-

affiliated companies and expatriates that are employed via military affiliation, in order to compare potential differences. These further studies may also provide more significant results for scores on the SCI-2.

### **Limitations**

Although this study provides more insight on expatriates living in South Korea, the self-report questionnaire is one limitation of the study. Self-report questionnaires don't ensure that the participants' responses are completely honest or an exact reflection of their lives. Additionally, the demographics questionnaire failed to differentiate between expatriates that are military affiliated and expatriates that are not. Lastly, participants were recruited electronically via social media. Individuals that may not use technology or social media were not given the opportunity to participate in the study.



## CHAPTER VI: CONCLUSION

Expatriates around the world are at greater risk for depression and the literature review revealed that having a sense of community could serve as a buffer. This study sought to explore the relationship between Sense of Community and depression among expatriates in the Republic of Korea. This study's definition of an expatriate included any skilled persons that have relocated to South Korea for the purpose of employment. Sense of Community among expatriates was identified using the Sense of Community Index-2 (SCI-2). Depression among expatriates was identified using the Symptom Checklist-90-Revision (SCL-90-R). In order to further investigate depression among expatriates in Korea, an online survey was posted on social media outlets encouraging participation. Two hundred participants were included in the study. Results revealed no statistical significance between depression and sense of community, as well as a number of demographic variables such as age and gender. The study did, however, indicate a significant difference in depression levels among Americans and non-Americans. This result provides a number of suggestions for further exploration in future studies.

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## APPENDIX A

### Informed Consent Form

**Researcher:** Danielle D. Barton

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**Affiliated Laboratory:** Yonsei University, Graduate School of Public Health, Room 402

#### Introduction

This is a study to learn more about the experiences, connections, and health statuses of expatriates living in South Korea. Researchers hope to learn about different variables that may increase or reduce expatriates' positive encounters and relations with the South Korean community. You have been selected as a possible participant for this study.

#### Procedure

To participate in the study:

1. Participants must be 21 years of age or older.
2. Participants will take a paper-and-pencil survey.
3. Participants can expect the survey to take about 5-10 minutes.
4. Participants will sign a consent form that will contain their name.

#### Risks

There are no known risks included in participating in this study.

#### Benefits

By participating in this study, participants may benefit by knowing that they have contributed in providing the field of Public Health with more information regarding expatriates and their experiences with the South Korean community.

#### Confidentiality

The survey is completely confidential. The data participants provide in the survey will not include any names or personal information that may lead to disclose their identity. There will be no way to connect participants' names with the data of the survey.

#### Withdrawal

Participation is completely voluntary. Participants can refuse to answer any question(s). Additionally, participants can stop participation in the study at any time. Refusal to participate will involve no penalty.

For questions or more information, participants can contact Researcher, Danielle D. Barton at [danielled.barton@gmail.com](mailto:danielled.barton@gmail.com).

You will be offered a copy of this form to keep.

You are making a decision whether or not to participate. Your signature indicates that you have read the information provided above and have decided to participate. Again, you may withdraw at any time without penalty or loss of benefits to which you may be entitled after signing this form should you choose to discontinue participation in this study.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Witness (If appropriate)

\_\_\_\_\_  
Signature of Investigator



## APPENDIX B

### SCI-2

The following questions about community refer to the Korean community.

#### **A. How important is it to you to feel a sense of community with other community members?**

1	2	3	4	5	6
Prefer Not to be Part of This Community	Not Important at All	Not Very Important	Somewhat Important	Important	Very Important

#### **B. How well does each of the following statements represent how you feel about the Korean community?**

Circle 0 if your answer is NOT AT ALL

Circle 1 if SOMEWHAT

Circle 2 if MOSTLY

Circle 3 if COMPLETELY

- |  |   |   |   |   |
|--|---|---|---|---|
| 1. I get important needs of mine met because I am part of the Korean community.  | 0 | 1 | 2 | 3 |
| 2. Korean community members and I value the same things.   | 0 | 1 | 2 | 3 |
| 3. The Korean community has been successful in getting the needs of its members met.   | 0 | 1 | 2 | 3 |
| 4. Being a member of the Korean community makes me feel good.  | 0 | 1 | 2 | 3 |
| 5. When I have a problem, I can talk about it with members of the Korean community.  | 0 | 1 | 2 | 3 |
| 6. People in the Korean community have similar needs, priorities, and goals.   | 0 | 1 | 2 | 3 |
| 7. I can trust people in the Korean community.   | 0 | 1 | 2 | 3 |
| 8. I can recognize most of the members of the Korean community.  | 0 | 1 | 2 | 3 |
| 9. Most Korean community members know me.  | 0 | 1 | 2 | 3 |
| 10. The Korean community has symbols and expressions of membership such as clothes, signs, art, architecture, logos, landmarks, and flags that people can recognize. | 0 | 1 | 2 | 3 |
| 11. I put a lot of time and effort into being part of the Korean community.  | 0 | 1 | 2 | 3 |
| 12. Being a member of the Korean community is part of my identity.   | 0 | 1 | 2 | 3 |

Circle 0 if your answer is NOT AT ALL  
 Circle 1 if SOMEWHAT  
 Circle 2 if MOSTLY  
 Circle 3 if COMPLETELY

13. Fitting into the Korean community is important to me.	0	1	2	3
14. The Korean community can influence other communities.	0	1	2	3
15. I care about what other Korean community members think of me.	0	1	2	3
16. I have influence over what the Korean community is like.	0	1	2	3
17. If there is a problem in the Korean community, members can get it solved.	0	1	2	3
18. The Korean community has good leaders.	0	1	2	3
19. It is very important to me to be a part of the Korean community.	0	1	2	3
20. I am with other Korean community members a lot and enjoy being with them.	0	1	2	3
21. I expect to be a part of the Korean community for a long time.	0	1	2	3
22. Members of the Korean community have shared important events together, such as holidays, celebrations, or disasters.	0	1	2	3
23. I feel hopeful about the future of the Korean community.	0	1	2	3
24. Members of the Korean community care about each other.	0	1	2	3

## APPENDIX C

### SCL-90-R

Below is a list of problems and complaints that people sometimes have. Please read each one carefully. After you have done so, select one of the numbered descriptors that best describes how much that problem has bothered or distressed you **during the past week, including today**. Circle the number in the space to the right of the problem and do not skip any items. Use the following key to guide how you respond:

Circle 0 if your answer is NOT AT ALL  
 Circle 1 if A LITTLE BIT  
 Circle 2 if MODERATELY  
 Circle 3 if QUITE A BIT  
 Circle 4 if EXTREMELY

### **How much were you bothered by:**

1.	Loss of sexual interest or pleasure	0	1	2	3	4
2.	Feeling low in energy or slowed down	0	1	2	3	4
3.	Thoughts of ending your life	0	1	2	3	4
4.	Crying easily	0	1	2	3	4
5.	Feeling of being trapped or caught	0	1	2	3	4
6.	Blaming yourself for things	0	1	2	3	4
7.	Feeling lonely	0	1	2	3	4
8.	Feeling blue	0	1	2	3	4
9.	Worrying too much about things	0	1	2	3	4
10.	Feeling no interest in things	0	1	2	3	4
11.	Feeling hopeless about the future	0	1	2	3	4
12.	Feeling everything is an effort	0	1	2	3	4
13.	Feelings of worthlessness	0	1	2	3	4

APPENDIX D  
Demographics

Are you a currently employed expatriate living in South Korea?

- a. Yes
- b. No

What is your age? \_\_\_\_\_

What is your gender?

- a. Female
- b. Male

What is your current marital status?

- a. Single
- b. Married
- c. Divorced
- d. Widowed

What is your nationality? \_\_\_\_\_

How long have you been living in Korea?

- |                  |                |
|------------------|----------------|
| a. 0 – 6 months  | d. 2 – 5 years |
| b. 6 – 12 months | e. _____ years |
| c. 1 – 2 years   |                |

How well can you speak Korean?

- a. Not at all/a few basic phrases (ahnyeonghasaeyo, camsahamnida, winchok, oranchok, etc)
- b. Survival (able to order food in Korean, take public transportation, etc.)
- c. Proficient (able to have a discussion, but still limited in vocabulary)
- d. Fluent (can freely express your thoughts and ideas in Korean)

What is your highest education level?

- a. Less than a high school diploma
- b. High school diploma
- c. Bachelor's Degree
- d. Master's Degree
- e. Doctorate Degree

How many hours do you work per week? \_\_\_\_\_ hours per week

What is your monthly income? \_\_\_\_\_ won / dollars